

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (currently amended) A method for preventing access to a shared peripheral device by a processor-based node in a multinode system, comprising:
 - (1) storing at the peripheral device a first unique value representing a first configuration of the multinode system;
 - (2) sending an access request from the processor-based node to the shared device, the request including a second unique value representing a second configuration of the multinode system;
 - (3) determining whether said first and second values are identical;
 - (4) if the first and second values are identical, then executing the access request to the peripheral device; andrepeating steps 3 and 4 each time an access request is sent from the processor-based node to the device.
2. (original) The method of claim 1, wherein:

said first value is generated utilizing at least in part information relating to a first time when the multinode system was in said first configuration; and

said second value is generated utilizing at least in part information relating to a second time when the multinode system was in said second configuration.
3. (original) The method of claim 2, wherein:

step 3 includes the step of determining whether said first and second times are identical.

4. (original) The method of claim 1, wherein said first and second values are generated based at least in part on epoch numbers generated by a membership protocol executing on said multinode system.

5. (original) The method of claim 4, wherein each of said first and second values is generated based at least in part on respective membership sets of said multinode system generated by said member-ship protocol.

6. (original) The method of claim 1, wherein each of said first and second values is generated based at least in part on respective membership sets of said multinode system generated by said membership protocol.

7. (currently amended) An apparatus for preventing access to at least one shared peripheral resource by a processor-based node in a multinode system, the shared resource being coupled to the multinode system by a resource controller including a controller memory, each of a plurality of nodes on the multinode system including a processor coupled to a node memory storing program modules configured to ~~executing~~ execute functions of the invention, the apparatus including:

a membership monitor module configured to determine a membership list of the nodes, including said shared resource, on the multinode system at predetermined times, including at least at a time when the membership of the system changes;

a resource manager module configured to determine when the shared resource is in a failed state and for communicating the failure of the shared resource to said membership monitor module to indicate to the membership monitor module to generate a new membership list;

a configuration value module configured to generate a unique value based upon said new membership list and to store said unique value locally at each node on the multinode system; and

an access control module stored at said controller memory configured to block access requests by at least one said requesting node to said shared resource when the locally stored unique value at said requesting node does not equal the unique value stored at said resource controller.

8. (currently amended) The apparatus of claim 7, wherein said configuration value ~~monitor~~ module is configured to determine said unique value based at least in part upon a time stamp indicating the time at which the corresponding membership list was generated.

9. (original) The apparatus of claim 7, wherein said unique value is based at least in part upon an epoch number generated by a membership protocol module.

10. (original) The apparatus of claim 7, wherein said membership monitor module is configured to execute independently of any action by said shared resource when said shared resource is in a failed state.

11. (original) The apparatus of claim 7, wherein said resource manager module is configured to execute independently of any action by said shared resource when said shared resource is in a failed state.

12. (currently amended) The apparatus of claim 7, wherein said configuration_value module is configured to execute independently of any action by said shared resource when said shared resource is in a failed state.

13. (original) The apparatus of claim 7, wherein said access control module is configured to execute independently of any action by said shared resource when said shared resource is in a failed state.

14. (previously presented) A computer usable medium having computer readable code embodied therein for preventing access to a shared peripheral device by a processor-based node in a multinode system, the computer usable medium comprising:

a storage module configured to store a first unique value representing a first configuration of the multinode system;

a reception module configured to receive access requests from a node to the shared peripheral device, each access request including a second unique value representing a second configuration of the multinode system;

a comparator module configured to determine, for each access request received, whether said first and second values are identical; and

an execution module for executing each access request at the peripheral device, if the first and second values are identical.

15. (previously presented) The computer usable medium of claim 14, wherein said storage medium includes a submodule configured to generate said first value using information relating to a first time when the multinode system was in said first configuration, and

further comprising a module configured to generate said second value using information relating to a second time when the multinode system was in said second configuration.

16. (previously presented) The computer usable medium of claim 15, wherein the comparator module includes a submodule configured to determine whether said first and second times are identical.

17. (previously presented) A computer usable medium having computer readable code embodied therein for preventing access to a shared peripheral device by a processor-based node in a multinode system having a plurality of nodes, the shared

peripheral device being coupled to the system by a resource controller, the computer usable medium comprising:

a membership monitor module configured to determine a membership list of the nodes including said shared peripheral device, on the system at predetermined times, including at least at a time when the membership of the system changes;

a resource manager module configured to determine when the shared peripheral device is in a failed state and for communicating the failure of the shared peripheral device to said membership monitor to indicate to the membership monitor to generate a new membership list;

a configuration value module configured to generate a unique value based upon said new membership list and to store said unique value locally at each node on the system; and

an access control module configured to block access requests by at least one requesting node to said shared peripheral device when the locally stored unique value a said requesting node does not equal the unique value stored at said resource controller.

18. (previously presented) The computer usable medium of claim 17, wherein said configuration value module is configured to execute independently of any action by said shared resource when said shared resource is in a failed state.

19. (previously presented) The computer usable medium of claim 17, wherein said membership monitor module is configured to execute independently of any action by said shared resource when said shared resource is in a failed state.

20. (previously presented) The computer usable medium of claim 17, wherein said resource manager module is configured to execute independently of any action by said shared resource when said shared resource is in a failed state.

21. (currently amended) The computer usable medium of claim 17, wherein said configuration value module is configured to execute independently of any action by said shared resource when said shared resource is in a failed state.

22. (previously presented) The computer usable medium of claim 17, wherein said access control module is configured to execute independently of any action by said shared resource when said shared resource is in a failed state.

23. (previously presented) The computer usable medium of claim 17, wherein said configuration value module includes a submodule configured to generate the unique value based at least in part upon a time stamp indicating the time at which the corresponding membership list was generated.

24. (currently amended) A computer data signal embodied in a carrier wave and representing sequences of instructions which, when executed by a remote computer, ~~causes~~ cause the remote computer to perform the steps of:

storing at a peripheral device a first unique value representing a first configuration of a multinode system;

sending an access request from a node to the shared peripheral device, the request including a second unique value representing a second configuration of the multinode system;

determining whether said first and second values are identical;

executing the access request at the peripheral device if the first and second values are identical;

repeating the determining step and the executing step each time an access request is sent from the node to the device.

25. (previously presented) The computer data signal for causing the remote computer to perform the step of claim 24, wherein the step of storing includes the substep of generating said first value using information relating to a first time when the multinode system was in said first configuration, and

further including the step of generating said second value using information relating to a second time when the multinode system was in said second configuration.

26. (previously presented) The computer data signal for causing the remote computer to perform the step of claim 25, further including the step of: determining whether said first and second times are identical.